



**San
Joaquin
River
Management
Program**

P.O. Box 942836, Sacramento, CA 94236-0001

April 26, 2001

Ms. Audrey Robinson
Merced River Education Initiative
Post Office Box 385
Snelling, California 95369

Dear Ms. Robinson:

I am writing in support of the "Merced River Education Initiative – K-12 education, Phase I" project.

The San Joaquin River Management Program provides a forum to identify problems and solutions to issues related to wildlife, flood protection, water quality, water supply, fisheries, and recreation. The SJRMP Action Team and Advisory Council have reviewed and discussed this project, and support the effort to increase public awareness and education regarding the value of the San Joaquin River watershed.

The 1995 San Joaquin River Management Plan recommends education projects related to recreation, wildlife, and fisheries (see p. 38). This recommendation is based on a need to develop education programs for all interested parties and to illustrate the benefits and functions of an improved San Joaquin River system.

If you have any questions in this regard, please contact Paula Landis, Action Team Chair, at (559) 230-3310.

Sincerely,

A handwritten signature in black ink, appearing to read "T. Ramirez".

Tim Ramirez, Advisory Council Chair
San Joaquin River Management Program

**SUPPORTING
DOCUMENTATION
IS ON THE
FOLLOWING PAGES**

CONCEPT PROPOSAL FORM I

For proposals with emphasis on capacity building, education and outreach, or research

Use this form to describe your concept for a proposal or project to apply to the CALFED Watershed Program for funding support. Use only the space provided, leaving at least a half inch margin with type size no smaller than 10 points. These guidelines are also available in electronic format on the Watershed Program web site:

baydeltawatershed.org

Project and Applicant Information:

Name of project:

A Merced River Education Initiative – K-12 education, Phase I”

Budget Estimate:

Funds requested: \$425,000

Match (cash & inkind): \$40,000

TOTAL: \$475,000

Project Applicants(s) and/or Principal Investigator(s) and affiliation(s) B use an additional sheet if necessary:

Merced River Education Initiative is the primary applicant. The group is a grassroots initiative among stakeholders, educators and Merced County community members. The Merced River Stakeholder Group, which includes landowners, industry, environmental interests, state, federal and local agencies, recreationists and citizens with an interest in the conservation and restoration of the lower Merced River and Watershed also supports this project.

Project manager or contact person, address, telephone and email (if fiscal agent is different, provide that information, also):

Merced River Education Initiative, c/o Ms. Audrey Robinson, P.O. Box 385, Snelling, CA 95369 (209) 722-2517, fax(209) 722-2261, dxranch@aol.com or Robinsoncattle@hotmail.com

Fiscal Agent: Merced Irrigation District Foundation or local non-profit currently under formation. First entity has expressed willingness, should local non-profit not yet be established when funds are available.

Project Abstract (include the county, watershed or other geographic reference):

This project will create K-12 science and social science curriculum to integrate Merced River Watershed concepts (history, science and technology) into formal Merced County educational programs, initiate the development of the Merced River Institute for learning, develop liaison with riverside landowners for educational access, and develop a river docent program to interface school children and the community with the river environments of the lower Merced River, Merced County, generally downstream of Crocker-Huffman Dam. Educational tools will include a web-based GUI/GIS format to bring the Merced River tangibly into the classroom. This element will be developed through the UCSB Department of Geography.

If your concept proposal is not selected for further consideration in this round of funding, would you like referral to other possible funding sources? YES XX NO

1. Describe your anticipated outcome, or what you plan to achieve, and what practices or programs you intend to use. If a research project, explain the hypothesis and methods on which your concept is based.

The anticipated outcome is the development of curriculum materials to support locally relevant science, math and historical education in Merced County based on the lower Merced River. Performance based learning goals will be incorporated into the curriculum development. This curriculum model could also be useful to other watershed education efforts. Also this project will build local capacity to use the Merced River as a local educational resource, for formal K-12 classrooms as well as a larger community.

Although local history is a required subject for all third grade students, nothing is taught about the Merced River because of lack of curriculum materials. The Merced River Education Initiative has secured the assistance of Dr. Mark Cioc, environmental historian from UC Santa Cruz, and of UC Santa Barbara, Department of Geography (Dr. Leale Mearns) and California Center for Effective Schools (Dr. Janice Millet, Graduate School of Education) as well as some initial seed funds from these institutions. Dr. Cioc will prepare a scholarly work on the History of the lower Merced River that can be used as the basis for curriculum development on local history. UCSB faculty will provide educational models using GIS and technology in education and state-of-the-art performance and evaluation techniques. In a county where the public school test scores are some of the lowest in the state, there is a critical need for success and performance based curriculum development. The connection to the Merced River will also develop a sense of place for students in the community as well as making accessible a wonderful outdoor classroom.

This project supports the Education component of the Merced River Education Initiative. The mission of this group of stakeholders, educators and researchers is to provide innovative educational opportunities regarding the Merced River to Merced County residents and to create successful model programs that can assist in other watersheds. Three interdependent components will frame this work: 1) Education (formal K-12 curriculum), 2) Outreach (to and engaging the larger community), and 3) scientific and historical research. Framework diagram is attached.

2. Describe the level of community involvement and activity anticipated in this project, including the following elements:

a. How will your activity promote community and landowner/user involvement in watershed management?

Curriculum development will involve local educators in the design and evaluation of the materials. Existing successful curriculum will be adapted if appropriate. Implementation of the curriculum will affect school children throughout Merced County and have a "trickle-down effect" through sharing between children and family members. Riverside landowners involved with the Initiative are excited about the possibility of controlled educational use of private lands as both a cooperative venture as well as an opportunity to provide education on respect for private property and outdoor etiquette.

b. What level of support is there from the local community and agencies?

Support or letters of support for this project have been received from the Merced River Stakeholder Group (by vote), the San Joaquin Raptor Center, Merced Irrigation District and MID Charitable Foundation, the US Fish and Wildlife Service, Calaveras Materials, Santa Fe Aggregates, California Department of Fish and Game, Stillwater Sciences, Merced City School District, Bettencourt Ranch and other community interests.

c.	How will the activity foster collaboration among multiple interests or scientific disciplines? The integration of science and environmental history in the curriculum path clearly involves multiple disciplines. The Merced River Education Initiative framework provides linkages among formal education, the community and outreach, and research – both scientific and in other disciplines.
d.	How will your project reach out to and encourage the active participation of local leadership and diverse community interests? The Merced River Education Initiative recognizes that local leadership is critical to the Initiative’s success. Support letters received to date indicate critical support from local leadership interests. Merced County is not yet included in that group because the County leaders need time to coordinate with Mariposa County, which hosts the upper Merced Watershed. The Initiative expects full County support ultimately, based on the very positive response received from key local constituencies. The curriculum materials will provide broader outreach throughout the county by implementation in County schools. Local interests will be involved in review of curriculum frameworks as they are developed.
e.	How will the activity contribute to on-going effective local management of the watershed? This activity will complement on-going watershed activities by providing a student-based curriculum to complement some of the awareness development currently occurring through the Merced River Stakeholder Group. CALFED is currently funding the development of a focussed river restoration plan which addresses geomorphic and riparian habitat concepts only. The Merced River Stakeholder Group is recognizing that watershed stewardship extends beyond these concepts and into the community
f.	What are the potential benefits to the local community, and how will those benefits be measured? School test scores in Merced County are some of the lowest in the state. The curriculum materials will be designed with measurable and accountable performance objectives. The involvement of UCSB faculty provides expertise to support this task. Less tangible benefits are expected including an enhanced sense of place for Merced County youth and enhanced communication among river stakeholders.
g.	How will the project benefits be distributed equitably within the community? Because this project will be distributed in schools throughout Merced County it will provide broadly distributed benefits. Recent assistance for environmental science education provided by the budding UC Merced is targeted on university-bound students. The need in the County is for all students.
h.	How does your project promote local community involvement with the continued development and implementation of the CALFED Bay Delta Program? The curriculum areas will be chosen to include linkages with goals and objectives of the CALFED Bay Delta Program. For example – Ecosystem restoration is both a targeted curriculum area, but includes opportunities for student service learning by participating in revegetation actions on the Merced River.

3. Describe how the concept demonstrates the value and contributions of watershed management (using a community based and locally led approach) to achieving CALFED goals for the Bay delta system and broader solution area (see Section 7).

Development of a Merced River based curriculum will logically include materials that address topics of ecosystem quality, the river as a local and downstream water supply, effects of water quality on aquatic biota and human uses of that water, flooding considerations. These topic areas, scaled to the appropriate grade and skill levels will build an increasing foundation of students equipped to deal with the complexities of watershed management as they grow into adults and decision-makers. Lessons learned about the Merced River will provide transferrable knowledge applicable to other watersheds where these students may ultimately reside.

4. Describe how the proposal promotes one or more of the initial implementation priorities of the Watershed Program (see Section 5).

This proposal strongly supports capacity building in the local community by providing critically needed tools and resources for Merced County educational programs

5. Describe how your proposal will establish or enhance a partnership between the local community and the CALFED Bay Delta Program.

This project was developed by local Merced River interests to meet Merced County needs. Previous projects funded by CALFED were not seen as being locally generated, but the community has developed an awareness that the CALFED Bay Delta program can be a locally useful tool by providing funding to compatible local projects. Technical assistance provided on other projects by staff of CALFED member agencies and consultants funded by CALFED projects has initiated that partnership linkage and has encouraged local interests to invest time and energy in developing this and other proposal concepts to link the Merced River with CALFED programs. The local community has an expectation of continued involvement by and access to CALFED partner agency staff as they move forward with this project. For example, there is an expectation that CALFED partner agency staff can provide technical review of curriculum elements to ensure accuracy. For example, curriculum elements dealing with water quality would be reviewed for accuracy by staff of the State Water Resources Control Board and the California Department of Fish and Game and US Fish and Wildlife Service could review elements dealing with river biota. CALFED funding for this proposal provides additional priority for assistance by partner agency staff, who are already managing heavy workloads.

6. Describe how your project will promote information exchange, including project monitoring and the transfer of technical information, among CALFED and others interested in watershed management.

Information exchange will occur at the adult level especially in the development of the curriculum materials. This process should engage educators in dialog with scientists, historians, agency staff and academic faculty. Technical review of the curriculum for accuracy will ensure that correct information is conveyed to students and ultimately the community. The educational conceptual models used as well as the curriculum developed will be available to other watershed groups.

7. Describe here any other important aspects of your program that you could not address in the above items, and that you feel are critical to fully describing your concept.

As stated above, this project supports the Education component of the Merced River Education Initiative. Because of the structure of the pre-proposal process there are two other companion pre-proposals being generated under the Merced River Education Initiative. One addresses initial water quality baseline data collection, an aspect of the research and outreach portions of the initiative. The other addresses community needs for information through a River Town Hall series. Also there is a proposal to evaluate Mercury contamination potential in dredge tailings used for restoration actions. These proposals all have been submitted to address needs identified by the Merced River Stakeholder Group and the Merced River Education Initiative.

Do you anticipate a desire for possible technical assistance from CALFED to fully develop your proposal?
Y__X__ N_____.

If yes, what type of assistance do you anticipate?

Advice on technical expertise available for technical review of curriculum.